

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/675,119	09/30/2003		Atsushi Shinozaki	KAW-0046	4968	
23413	7590	05/01/2006		EXAM	EXAMINER	
CANTOR		•	KIANNI, I	KIANNI, KAVEH C		
55 GRIFFIN ROAD SOUTH BLOOMFIELD, CT 06002				ART UNIT	PAPER NUMBER	
,				2883		
				DATE MAILED: 05/01/2006		

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)					
Office Action Commence	10/675,119	SHINOZAKI ET AL.					
Office Action Summary	Examiner	Art Unit					
<u> </u>	Kianni C. Kaveh	2883					
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address					
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be timed within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).					
Status							
1) Responsive to communication(s) filed on 17 Fe	ebruary 2006.						
· · · · · · · · · · · · · · · · · · ·	action is non-final.						
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims							
4)⊠ Claim(s) <u>1,3-7 and 9-12</u> is/are pending in the a	pplication.						
· · · · · · · · · · · · · · · · · · ·	4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.							
6) Claim(s) 1 and 3 is/are rejected.							
7) Claim(s) 1 and 4-7 and 9-12 is/are objected to							
8) Claim(s) are subject to restriction and/or		·					
Application Papers							
9) The specification is objected to by the Examine	•						
· · · · · · · · · · · · · · · · · · ·	☐ The specification is objected to by the Examiner. ☐ The drawing(s) filed on <u>13 June 2005</u> is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
•	•	•					
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Ex		• •					
Priority under 35 U.S.C. § 119		•					
12) Acknowledgment is made of a claim for foreign	priority under 35 LLS C & 110(a)	(d) or (f)					
a) ☐ All b) ☐ Some * c) ☐ None of:	priority under 33 0.3.C. § 119(a)	-(u) or (i).					
1. Certified copies of the priority documents	s have been received						
		on No					
_	 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage 						
application from the International Bureau	_						
* See the attached detailed Office action for a list of		d.					
	1 10						
Attachment(s)	·	•					
1) Notice of References Cited (PTO-892)	4) Interview Summary						
2)	Paper No(s)/Mail Da 5) Notice of Informal P	ite atent Application (PTO-152)					
Paper No(s)/Mail Date	6) Other:						

DETAILED ACTION

Acknowledgement made of canceling claims 2 and 8 in the amendment submitted on 2/17/06.

Claim 1 is objected to because of the following informalities: 'a plates' in the 3rd

line of claim 1 is incorrect and should be presented as plural such as 'a pair of base

Claim Objections

plates'. Appropriate correction is required.

Allowable Subject Matter

Claims 4-7 and 9-12 are objected to as being dependent upon a rejected base

claim, but would be allowable if rewritten in independent form including all of the

limitations of the base claim and any intervening claims. These claims once the

corrections are made allowable, since the prior art of the record, alone or in

combination, in combination with the rest of the limitations of the base claim does not

teach their perspective limitations (of dependent claims).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary.
 Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takabayashi et al. (US 6522809).

Regarding claims 1 and 3, Takabayashi teaches an optical fiber grating part (shown in at least fig. 5B) comprising; an elongated pedestal 7, and a pair of base plates 4 installed on said pedestal 7 apart from each other in the longitudinal direction of said pedestal and having a different coefficient of thermal expansion from said pedestal 7 (see at least col. 14, 4th parag.), and an optical fiber passing through said pedestal 7, and connected to connection points 6 installed on said pedestal 7 and said base plates located apart from each other in the longitudinal direction of said pedestal (see figures 15a,b, items fiber and connection points 6 and col. 10, lines 59-61) and having an optical fiber grating 2 located between said connection points 6, wherein a predetermined tensile force 8 is added to said optical fiber grating 2, and said pedestal and said base plates thermally expand or thermally shrink independently in the longitudinal direction of said pedestal 7 (see col. 14, 5th parag.); and an extension line of an axis of said optical fiber 1 joining said connection points 6 passes through a contact

surface (K) of said pedestal 7 and a connection part of said base plate 4/14 (see at least fig. 19, item an extension of fiber 1 passing through pedestal 7 and a part of connection part 21 where etching/grooving(s)/spin-coating are created see col. 17, line 66-col. 18, 1st parag.); (shown at least in fig. 15b, each plate 4 has connection points 6).

However, Takabayashi does not specifically teach wherein the above coefficient of thermal expansion is 'coefficient of linear thermal expansion'. However, as shown at least in fig. 16, the brag wavelengths $\lambda 1$ -n linearly change with applied voltage in which. Thus, it is obvious/well-known to those of ordinary skill in the art when the invention was made that linear change in brag wavelengths $\lambda 1$ -n as function of applied voltage/heat is/known-as related to coefficient of linear thermal expansion, since such linearity would allow controlling of the brag wavelength more easily than in the prior art after production (see col. 4, 2^{nd} parag.).

Response to Arguments and Amendment

Applicant's argument filed on 1/22/05 have been fully considered but they are not persuasive.

Applicant asserts (page 9, 4th-5th parag.) that Takabayashi does not teach or suggest an extension line of an axis of said optical fiber joining said connection points passes through a contact surface (K) of said pedestal and a connection part of said base plate. The examiner responds that indeed Takabayashi teaches an extension line of an axis of said optical fiber 1 joining said connection points 6 passes through a contact surface (K) of said pedestal 7 and a connection part of said base plate 4/14 (see

at least fig. 19, item an extension of fiber 1 passing through pedestal 7 and a part of connection part 21 where etching/grooving(s)/spin-coating are created see col. 17, line 66-col. 18, 1st parag.)

 The examiner kindly tried to contact Ms. Bae on 4/25/06 to suggest changes to be made into independent claim to appropriately narrow the scope of the invention in order to have the case allowed, however, by the end of that day the examiner had not been contacted.

THIS ACTION IS MADE FINAL

This action in response to applicant's amendment made FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to K. Cyrus Kianni whose telephone number is (571) 272-2417:

The examiner can normally be reached on Monday through Friday from 8:30 a.m. to 6:00 p.m. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank Font, can be reached at (571) 272-2415.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks Washington, D.C. 20231

or faxed to:

(703) 872-9306 (for formal communications intended for entry)

or:

Hand delivered responses should be brought to Crystal Plaza 4, 2021 South Clark Place, Arlington, VA., Fourth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application should be directed to the Group Receptionist whose telephone number is (703) 308-0956.

K. Cyrus Kianni Patent Examiner Group Art Unit 2883

KAVEH KIANNI PRIMARY EXAMINER

April 25, 2006